

University of  
Lethbridge



## Program Planning Guide

Name: \_\_\_\_\_

ID: \_\_\_\_\_

Calendar Year: 2023/2024

**Major in General Major in the Sciences:**

[www.ulethbridge.ca/artsci/general-majors](http://www.ulethbridge.ca/artsci/general-majors)

**Academic Calendar:**

[www.ulethbridge.ca/ross/academic-calendar](http://www.ulethbridge.ca/ross/academic-calendar)

**High School Admission Requirements:**

[www.ulethbridge.ca/ross/admissions/undergrad/high-school](http://www.ulethbridge.ca/ross/admissions/undergrad/high-school)

**Current and Past Program Planning Guides:**

[www.ulethbridge.ca/ross/ppgs](http://www.ulethbridge.ca/ross/ppgs)

**Co-operative Education:**

[www.ulethbridge.ca/career-bridge/co-operative-education](http://www.ulethbridge.ca/career-bridge/co-operative-education)

**Faculty of Arts and Science Advising:**

[www.ulethbridge.ca/artsci/advising](http://www.ulethbridge.ca/artsci/advising)  
artsci.advising@uleth.ca  
403-329-5106  
M2102

**Faculty of Education Advising:**

[www.ulethbridge.ca/education/student-advising](http://www.ulethbridge.ca/education/student-advising)  
edu.sps@uleth.ca  
403-329-2254  
TH421

General Major in the Sciences/Mathematics Education

**Bachelor of Science/Bachelor of Education**

This is a planning guide and not a graduation check or guarantee of course offerings. You should have a program check done in your final year of studies. Students are responsible for the accuracy of their own programs. The guide should be used in conjunction with the University of Lethbridge Calendar, which is the final authority on all questions regarding program requirements and academic regulations.

Contact an Academic Advisor ([www.ulethbridge.ca/ross/academic-advising](http://www.ulethbridge.ca/ross/academic-advising)) for advising information.

**Name :** \_\_\_\_\_

**ID :** \_\_\_\_\_

**Program Requirements**

Completion of at least 30 courses (90.0 credit hours) from disciplines offered by the Faculty of Arts and Science, Faculty of Fine Arts, or School of Liberal Education with a grade point average of at least 2.00.

Completion of the equivalent of 20 courses (60.0 credit hours) in Education with a program grade point average of at least 2.50 in Education courses and the appropriate major.

**Major Requirements (16 courses)**

**First Disciplinary Stream: Mathematics**

Seven courses (21.0 credit hours) in Mathematics or Statistics

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_

Four courses (12.0 credit hours) in each of two other disciplinary streams chosen from the list below:

**Second Disciplinary Stream:** \_\_\_\_\_

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

**Third Disciplinary Stream:** \_\_\_\_\_

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

- Archaeology - all courses designated Science
- Biological Sciences - all Biology courses
- Chemistry - all courses (including courses in Biochemistry)
- Computer Science - all courses
- Geography - all courses designated Science
- Kinesiology - all courses designated Science (neither Kinesiology 1160 nor Kinesiology 1161 may be included)
- Neuroscience - all courses
- Physics - all courses (including courses in Astronomy and Engineering)
- Psychology - all courses designated Science

**One of (Science in Human Affairs):**

- \_\_\_\_\_ Biochemistry 2300 - Elements of Human Nutrition
- \_\_\_\_\_ Biology 2500 - Biology and Society
- \_\_\_\_\_ Environmental Science 2000 - Fundamentals of Environmental Science
- \_\_\_\_\_ Philosophy 2233 - Philosophy and the World View of Science: Earth and Life Sciences
- \_\_\_\_\_ Philosophy 2234 - Philosophy and the World View of Science: Space, Time and Matter
- \_\_\_\_\_ Philosophy 3402 - Biomedical Ethics
- \_\_\_\_\_ Physics 2020 - The Physics of Everyday Life

\_\_\_\_\_ Of the 16 courses (48.0 credit hours) required in the major, six courses (18.0 credit hours) must be at the 3000/4000 level

**Other Courses (minimum 14 courses)**

Courses offered by the Faculty of Arts and Science, Faculty of Fine Arts, or School of Liberal Education only (no courses labelled ABHL, ACCT, ADCS, AGEM, CDEV, CRED, EDUC, FINC, HLSC, HRLR, IGBM, IMGT, MGT, MKTG, NURS, PUBH, or TREC unless cross-listed with a course from one of the above faculties)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_

**Education Requirements (20-course equivalent)**

- \_\_\_\_\_ Education 2500 - Orientation to Teaching (3.0 credit hours)
- \_\_\_\_\_ Professional Semester I (15.0 credit hours)
- \_\_\_\_\_ Professional Semester II (15.0 credit hours)
- \_\_\_\_\_ Professional Semester III (15.0 credit hours)
- \_\_\_\_\_ Education Foundation (3.0 credit hours) at the 43xx level:  
\_\_\_\_\_
- \_\_\_\_\_ Three Education Electives (9.0 credit hours) at the 3000 or 4000 level:  
1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_

**Notes**

To determine if a given course in a disciplinary stream has a Science designation, see List III: Science Courses (refer to the 2023/2024 University of Lethbridge Calendar, p. 83).

Some of the Science in Human Affairs courses have prerequisites which may or may not be included in the major.

Students are strongly encouraged to choose Science disciplines which are school subject areas or are taught in the provincial curriculum.

**Completion of the Liberal Education List Requirement (Lib Ed Requirement)**

Only four courses (12.0 credit hours) in total may be counted from any one discipline toward the Lib Ed Requirement. Disciplines are identified by separate course subject codes.

Only four courses (12.0 credit hours) in total from the Faculty of Education (EDUC), Faculty of Health Sciences (ABHL, ADCS, HLSC, NURS, PUBH, and TREC), and the Dhillon School of Business (ACCT, AGEM, FINC, HRLR, IGBM, IMGT, MGT, and MKTG) may be counted towards the Lib Ed Requirement, but could be deemed extra to program.

See the 2023/2024 Calendar, p. 83, for more information.

\_\_\_\_\_ Four Fine Arts and Humanities courses:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

\_\_\_\_\_ Four Social Science courses:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

\_\_\_\_\_ Four Science courses:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

Not more than 10 courses (30.0 credit hours) completed at the 1000 level (or lower) [0500 - 1999] for credit towards the degree, excluding Activity courses (labelled PHAC and MUSE) and courses numbered in the range of 0520 to 0530.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

\_\_\_\_\_ **Education Minor (Optional):** \_\_\_\_\_

See the 2023/2024 Calendar, p. 159, for more information.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

*(Education methods requirement)*

Completion of at least 10 courses (30.0 credit hours) from disciplines offered by the Faculty of Arts and Science, Faculty of Fine Arts, or School of Liberal Education at the 3000 or 4000 level, excluding Activity courses (labelled PHAC and MUSE). Out-of-faculty courses (i.e. labelled ABHL, ACCT, ADCS, AGEM, CDEV, CRED, EDUC, FINC, HLSC, HRLR, IGBM, IMGT, MGT, MKTG, NURS, PUBH, and TREC) will not meet this requirement.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

\_\_\_\_\_ Not more than three Independent Study courses (9.0 credit hours) may be completed for credit towards the degree.

\_\_\_\_\_ Not more than three Disciplinary Credit Applied Studies courses (9.0 credit hours) may be completed for credit towards the degree. Students may, in addition, complete Applied Studies 2000, 2001, 2010, and 2011.

\_\_\_\_\_ \*Not more than 17 courses (51.0 credit hours) may be completed from any one discipline for credit towards the degree.

\_\_\_\_\_ Not more than six credit hours in Activity courses (i.e. courses labelled PHAC and MUSE) may be completed for credit towards the degree, except for Kinesiology majors (not more than 15.0 credit hours) and Music majors (not more than 12.0 credit hours).

\_\_\_\_\_ Residence requirement:

**Degree:Arts and Science**

at least 15 courses (45.0 credit hours) offered by the Faculty of Arts and Science, Faculty of Fine Arts, or School of Liberal Education must be completed at the University of Lethbridge.

**Education**

at least 15 courses (45.0 credit hours) offered by the Faculty of Education must be completed at the University of Lethbridge.

**Major:** at least half of the courses required in the major must be completed at the University of Lethbridge.

*\*Disciplines are identified by a specific course label (e.g. KNES, ASTR, and HIST are separate disciplines).*

\_\_\_\_\_ **Education Specialization (Optional):** \_\_\_\_\_

See the 2023/2024 Calendar, p. 165, for more information.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

*(Specialization Internship)*

**Sample Sequencing Plan**

Shown below is a sample sequence of courses for your degree. Consult timetables for course offerings, prerequisites, and corequisites before registering each term. This is just one example of how you could complete your major and degree requirements; you may find that a different sequence works as well as this one.

<p><b>Year 1, Fall</b>                  Mathematics 1560 or                  Mathematics 1565                  Second stream course                  Third stream course                  Lib Ed Requirement course                  Lib Ed Requirement course</p> <p><b>Year 2, Fall</b>                  Education 2500<sup>1</sup>                  Mathematics 1410                  Statistics 1770                  Third stream course                  Lib Ed Requirement course</p> <p><b>Year 3, Fall</b>                  Professional Semester I</p> <p><b>Year 4, Fall</b>                  Mathematics/Statistics 3000/4000 level                  Third stream course 3000/4000 level                  Science in Human Affairs course                  Elective 3000/4000 level                  Elective 3000/4000 level</p> <p><b>Year 5, Fall</b>                  Professional Semester III</p>	<p><b>Year 1, Spring</b>                  Mathematics 2560 or                  Mathematics 2565                  Second stream course                  Lib Ed Requirement course                  Lib Ed Requirement course                  Lib Ed Requirement course</p> <p><b>Year 2, Spring</b>                  Mathematics 2000                  Second stream course                  Third stream course 3000/4000 level                  Lib Ed Requirement course                  Lib Ed Requirement course</p> <p><b>Year 3, Spring</b>                  Mathematics/Statistics 3000 level                  Second stream course 3000/4000 level                  Elective 3000/4000 level                  Elective 3000/4000 level                  Elective</p> <p><b>Year 4, Spring</b>                  Professional Semester II</p> <p><b>Year 5, Spring</b>                  Education Foundation course (43xx)                  Education elective 3000/4000 level                  Education elective 3000/4000 level                  Education elective 3000/4000 level                  Mathematics/Statistics 3000/4000 level</p>
<p><b>Elementary Education and Inclusive Education students will reverse the fall and spring terms in Year 5 and complete PS III in the spring.</b></p>	

<sup>1</sup> Education 2500 must be completed (with a Pass Recommend) before admission. It may be taken in the spring or summer term immediately prior to the fall intake.

**Faculty of Education Admission**

To be considered for admission to the Faculty of Education, successful completion of the following is required:

- \_\_\_\_\_ 14 graded term courses (42.0 credit hours).
- \_\_\_\_\_ **Education Admission GPA:** Minimum cumulative grade point average of 2.50 on all U of L and transferable courses taken within the terms containing the last 14 courses (42.0 credit hours). All courses must be graded.
- \_\_\_\_\_ Minimum of eight courses (24.0 credit hours) in the 16-course General Major, including at least four courses (12.0 credit hours) in the first disciplinary stream.
- \_\_\_\_\_ **Major GPA:** Minimum cumulative grade point average of 2.50 on all graded courses comprising the major, including all transferable courses.
- \_\_\_\_\_ Credit in Education 2500 - Orientation to Teaching (or equivalent) prior to the fall program intake, including a favourable recommendation from the instructor.

Students are advised to contact Student Program Services in the Faculty of Education (edu.sps@uleth.ca; TH421; tel. 403-329-2254) for guidelines regarding the requirements stated above. For specific information on admission requirements, please refer to the Combined Degrees section of the Academic Calendar: [www.ulethbridge.ca/ross/academic-calendar](http://www.ulethbridge.ca/ross/academic-calendar)

Students of Indigenous descent, and students with a significant shift in academic performance, are advised to refer to the current Calendar for the Faculty of Education's Special Case Admission policies.

**Combined Degrees Program:**

Students begin this program in the Faculty of Arts and Science where they progress toward completion of Arts and Science degree requirements, and prepare to meet the admission requirements for the Faculty of Education. Please note that completion of admission requirements does not guarantee admission to the Faculty of Education.

**Application and Document deadlines:**  
[www.ulethbridge.ca/ross/admissions/undergrad/deadlines](http://www.ulethbridge.ca/ross/admissions/undergrad/deadlines)